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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,428	03/31/2004	Jaswant Sandhu	8775-012	7624

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EXAMINER

ADAMS, GREGORY W

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/815,428	SANDHU ET AL.	
	Examiner	Art Unit	
	Gregory W. Adams	3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/31/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).
2. A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-35 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1-35 of copending Application No. 10/202,401 which has the same inventive entity and was published on January 22, 2004. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

It appears as though applicant inadvertently failed to remove claims 1-35 when filing the instant application because during the prosecution of the previously published and co-pending application 10/202,401 applicant elected without traverse claims 1-35 and cancelled claims 36-44. In the instant application only claims 36-44 were examined.

Priority

3. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence(s) of the specification or in an application data sheet by identifying the prior application by

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application number (37 CFR 1.78(a)(2) and (a)(5)). If the prior application is a non-provisional application, the specific reference must also include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 41 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Referring to specification page 3, lines 3-25, the claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant discloses that a wafer sensor is structured to detect wafer contact pad displacement, but discloses no further structure other than a pad. As the wafer handling art is complex and highly iterative in sensing variations, i.e. spring, capacitance, optical, or resistive, it is unclear how applicant's mechanical displacement works without more.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 40 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

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regards as the invention. Referring to line 1, it is unclear whether "sensing of wafer" as depending from claim 39 refers to presence or position or both.

Claim 42 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Referring to line 2, it is unclear whether "peripheral zone" refers to the peripheral zone of one wafer, or in the alternative the peripheral zone of 2, 3, 4, or 5 wafers together.

Drawings

6. The drawings are objected to under 37 CFR 1.83(a) because they fail to show optically detect displacement of the wafer contact pad 34 as described in the specification on page 3, Ins. 21-22, and page 4, line 4.
7. As stated above in 112, first paragraph rejection, it is unclear to one skilled in the art of wafer handling how this is enabled. Sensing wafer position and presence is a critical because the step of grasping a wafer relies on wafer presence. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).
8. With respect to the provisional double patenting rejection noted above, "sub-bodies" referred to in the specification page 4, line 4, should be shown.
9. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The

figure or figure number of an amended drawing should not be labeled as "amended."

If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claim 36-39 & 42-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Cameron et al. (WO 00/02803) (cited by applicant).

12. With respect to claim 36, referring to FIGS. 1-7 Cameron et al. discloses a method for moving wafers comprising positioning robotic hand blades 24, 116, inserting a hand 108, 116 into a receptacle 141, grasping wafers 140 with blades 24, 116,

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withdrawing a hand 108, 116, positioning a hand 108, 116, inserting a hand 108, 116 into a second receptacle 141, and releasing wafers.

13. With respect to claim 37, referring to FIGS. 1-7 Cameron et al. discloses a hand 24 which retrieves one wafer (or 2,3,4,5).

14. With respect to claim 38, referring to FIGS. 1-7 Cameron et al. discloses a method for moving wafers further comprising sensing wafer presence 58.

15. With respect to claim 39, referring to FIGS. 1-7 Cameron et al. discloses sensing wafer presence 58 and wafer position (page 4, Ins. 9-20) further comprises sensing wafer peripheral zone. Page 4, Ins. 9-20.

16. With respect to claim 42, referring to FIGS. 1-7 Cameron et al. discloses sensing wafer presence 58 and wafer position comprises optically sensing 58 a wafer peripheral zone. Page 4, Ins. 9-20.

17. With respect to claim 43, referring to FIGS. 1-7 Cameron et al. discloses mechanically grasping wafers 140 comprises mechanically grasping each wafer peripheral zone. Page 4, Ins. 9-20.

18. With respect to claim 44, referring to FIGS. 1-7 Cameron et al. discloses releasing wafers comprises arraying wafers in a second wafer receptacle.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cameron et al. (WO 00/02803) (cited by applicant) as applied to claim 36 above, and further in view of Bacchi et al. (US 6,275,748). Cameron et al. discloses position and presence sensors but does not disclose detection wafer position or presence via wafer pad displacement, or optical wafer pad displacement. Referring to FIGS. 1-18 Bacchi et al. discloses sensing wafer presence (col. 2, Ins. 20-24) comprises detecting wafer displacement of a wafer contact pad 222 comprises optically detecting 228, 230 (col. 12, Ins. 51-60) displacement of a wafer contact pad 222 (col. 12, Ins. 51-60) to reduce moving mechanisms within a robotic hand thereby reducing contamination within a wafer receptacle. Col. 2, Ins. 20-50. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the robotic hand blade of Cameron et al. to include sensing the displacement of a wafer pad by optically sensing pad displacement, as per the teachings of Bacchi et al., to reduce moving mechanisms within a robotic hand thereby reducing contamination within a wafer receptacle.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W. Adams whose telephone number is (703) 305-0555. The examiner can normally be reached on M-Th, 8:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on (703) 308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gwa


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